

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 26, 2004

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: J. S. Contardi SRS Site Representative
SUBJECT: SRS Report for Week Ending November 26, 2004

The site rep. was out of the office on Thursday and Friday.

Presentation on the Space Shuttle Columbia Accident: On Monday, the site rep attended a presentation on the space shuttle Columbia accident sponsored by the Westinghouse Savannah River Company (WSRC). The presentation was given by Roger E. Tetrault who was one of the 12 accident investigation board members. Mr. Tetrault's presentation was well received and highlighted potential similarities between National Aeronautical and Space Administration operations and ongoing activities at the Savannah River Site. Following the presentation, senior managers held a round table luncheon with the speaker to further discuss the investigation board's findings and how they apply to SRS operations.

Solid Waste Management Facility: Last week WSRC declared a Potential Inadequacy in the Safety Analysis (PISA) for transuranic waste drum processing. The PISA involves the potential for significant quantities of beryllium to be contained in drums with greater than 100 fissile grams equivalent (FGE). The beryllium could potentially invalidate assumptions in the nuclear criticality safety evaluation. Current analyses note that historical data does not indicate any drums containing greater than 100 FGE and beryllium. However, recent processing has indicated that TRU drum generator data can not be relied upon for assuring safety basis assumptions.

In the last several months, numerous PISAs have been declared at the Solid Waste Management Facility (SWMF) involving assumptions in the safety basis. The increase in safety basis related findings are primarily an artifact of the changing mission of SWMF. During the last several years, SWMF has rapidly shifted from a storage facility to a drum and waste processing facility. Initial drum processing entailed relatively low activity and hence low risk drums. As higher risk drums are processed, increased attention must be placed on existing safety basis assumptions regardless of previous TRU drum processing history.

H-Canyon Waste Processing: WSRC intends to disposition the waste generated from processing unirradiated Mark-22 fuel in the Saltstone Disposal Facility (site rep weekly 11/05/04). A readiness assessment scheduled for the week of November 15 has been delayed. The intended transfer path requires modification of existing H-Tank Farm infrastructure. Following the installation of a transfer pump, the pump section jumper could not be properly installed. The jumper was fabricated too long to properly fit with the existing pump connections. WSRC has modified the jumper. Following a successful leak test, the readiness assessment is expected to begin on December 1st.